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SUMMARY OF THE INVENTION

TO 3600 MAIL ROOM

1. Purposes of the Invention

Based on the state of the art, the present invention has the object to build a camshaft with commercially available materials and semifinished materials with a simple technology, wherein said camshaft is manufactured in mass production at an advantageous cost.

These and other objects and advantages of the present invention will become evident from the description which follows.

2. Brief Description of the Invention

The present invention provides for a camshaft comprising a pipe or a solid rod, coated by a jointing coating on an outer cylindrical surface and an inner cylindrical surface. The camshaft includes cams, bearing rings, end pieces connected by means of longitudinal compression joints to the pipe and provided with a surface coating on surfaces being in contact with the pipe. The surface coating prevents a tribocorrosion and increases load capacity as compared to conventional compression joints.

The attachment of the cams and of the other parts on the pipe is performed with a longitudinal compression joint. The pipe is coated, preferably with a finely crystalline



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phosphate coating, as known from the East German printed patent document 015 2972, such that the overdimensioned cams, which are to be slipped, do not score and seize, that the friction tightness is increased, and that no tribocorrosion is generated later on. Following a careful



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camshaft segment;

Fig. 2 is a schematic sectional view through a camshaft end;

Fig. 3 is a view of the entire camshaft on a reduced scale.

DESCRIPTION OF INVENTION AND PREFERRED EMBODIMENT

The jointing coating 2 between the pipe 1 and the cams 3 of light-weight sheet metal construction is indicated in Fig. 1. However, the jointing coating 2 in fact does not have a measurable radial extension.

In Fig. 2, the pipe has an inner coating 5, such that the end pieces 4 and 7 can be pressed in.

Fig. 3 shows the entire camshaft, wherein all parts to be disposed on the pipe, are longitudinally pressed onto the camshaft. For simplicity's sake, the cams are represented as disks.